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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,184	03/09/2000	Henry Li	36941/CAG/B600	2290

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EXAMINER

VINCENT, DAVID ROBERT

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/522,184

Applicant(s)

LI ET AL.

Examiner

David R Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-14,16-26,28-48,50-71,73-83 and 85-94 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-14,16-26,28-48,50-71,73-83 and 85-94 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 15.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The request filed on 5/11/04 for a RCE based on parent Application No. 0/522,184 is acceptable and a RCE has been established. An action on the RCE follows.

Response to Amendment

2. Applicant's arguments with respect to claims 1-94 have been considered but are moot in view of the new ground(s) of rejection.

3. The applicant still has 88 claims pending in the application. There does not appear to be any reason why the invention could not be claimed in 30 claims or less. Using 88 claims appears to merely add to the complexity and length of time involved on both parties.

4. Claim 1 specifies a phrase a data pump for demodulating if the format is modulated. Does this sound like the data pump is not there ^{if} ~~is~~ modulated data is not present?

5. Claim 1 specifies the phrase "capable of" and it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

6. Claim 48 specifies receiving a modulated modem data. Does the term "a" need to be there?

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Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1,3-5,7, 41, 14,26,48,50, 71,57, 83,35,57,36-37, 58, 59, 62, 17, 28, 61, 73, 77, 85, 29, 30,51,52, 38,74,84,86,16, 18,39, 63, 75, 87, and 60 are rejected under 35 U.S.C. 102(e) as being anticipated by Arimilli (US 6,515,984).

As shown in e.g., Figs, 3-6C, 11-19, Arimilli discloses a plurality of signals and formats (receiving and transmitting at least voice and fax from and to both analog PSTN and digital leased lines, e.g., Fig. 6C and respective disclosure), as specified in claims 1,14,26,48,71,83; a first device being a telephone (RX from PSTN, Fig. 6C); detecting inputs or formats (col. 7, lines 47-53; col. 9, lines 59-67; col. 23, lines 40-64); encoding voice data (col. 4, lines 46-65; col. 7, lines 11-27; col. 12, lines 43-49; col. 14, lines 15-65); receiving from PSTN (col. 8); PCM data (col. 11, lines 50-67; col. 14, lines

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54-65); fax (col. 8); using computer readable devices (col. 9); data pump or demodulating fax data or data that was modulated using a voice band carrier (pumping out data from fax demodulator, cols. 23-24; col. 4, lines 46-65; demodulating from analog carrier, col. 7, lines 1-10; col. 32, line 65-col. 24, line 14); selectively outputting both the demodulated fax data and the encoded voice data (e.g., Figs. 2, 15-19; or col. 4, lines 30-46; outputting to digital leased lines, col. 5, lines 9-13; col. 6, lines 9-14; composite link, 315; muxing sporadic activity, col. 5, lines 40-51), decoding from packet network (Fig. 6A, col. 7, lines 30-47; input/output, 602, Fig. 6A; A/D and D/A, bi-directional, Fig. 6C; col. 6 lines 55-59), using packets (col. 5, lines 40-51); using packet data networks (col. 9, lines 15-47, especially line 39; DDS network, Fig. 6B); buffering data (col. 6, lines 30-47; 604, Fig. 6A; 402, Fig. 6C; col. 14, lines 40-53); voice activity detection (col. 12, lines 4-11; col. 20, lines 10-25; 1205, Fig. 12; col. 15, line 49-col. 16, line 59), as specified in claims 1,3-5,7, 14,26,48,71,83,35,50, 57,36-37,58,59,62,17,28,61, 73,85, 29, 30,51,52,38,74,86,16,18,39,63,75,87,and 60.

Claim Rejections - 35 USC § 103

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8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8,23,42,68,78,92, 6, 19, 40, 64, 76, 88, 9, 24, 69, 79, 93, 11,12,44, 46, 20,21,46,65,43, 66,45, 81,89,90, 13,22,47,67, 82, 91, 31, 53, 10,25,70,80,94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimilli (US 6,515,984) as set forth above in view of Murphy (US 2002/0036791).

However, Arimilli fails to particularly call for voice activity detection from the packet data network (PDN) to the PSTN, as specified in e.g., claims 8,23,42,68,78,92; inserting comfort noise, as specified in claims 6,19,40,64,76,88,9, 24,42,68,69, 79,93; using the buffers (col. 6, lines 30-47; 604, Fig. 6A; 402, Fig. 6C; col. 14, lines 40-53) for the purpose of jitter compensation, as specified in claims 11,12,20,21,46,65, 66,81, 89,90; adjusting holding times in the jitter buffers, as specified in claims 13,22,47,67,82,91; and specifically using IP, as specified in claims 31 and 53.

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Murphy teaches voice activity detection from the packet data network and suppressing when no voice is detected (claims 9-15, especially 9, 12), as specified in e.g., claims 8,23,42,68,78,92; inserting comfort noise (claims 9-14, especially claim 12), as specified in claims 6,19,40,64,76, 88,9,24,42,68,69,79,93; using the buffers (claims 9-14) for the purpose of jitter compensation, as specified in claims 11, 12, 20, 21, 46, 65, 66, 81, 89, 90; adjusting holding times in the jitter buffers (claims 9-14, especially claim 10), as specified in claims 13,22,47,67,82,91; and specifically using IP (sections 29 and 38-39, 119), as specified in claims 31 and 53; detecting lost packets (claim 13-14), as specified in claims 10,25,70,80,94.

It would have been obvious to add the reverse path voice activity detection of Murphy since it is clear that data is being received from the packet network disclosed in Arimilli (Fig. 6A, col. 7, lines 30-47; input/output, 602, Fig. 6A; A/D and D/A, Fig. 6C; col. 6 lines 55-59). By detecting voice silence in both directions, and using the various buffers (e.g., col. 7, lines 1-270 to compensate for jitter and detecting lost packets, Arimilli could make the signals sound more natural or pleasing and Arimilli is clearly concerned with quality (cols. 13-14, especially col. 13, lines 39-40 and col. 14, lines 2-6).

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Arimilli already discloses using packets and frames (Figs. 15-19; col. 6, lines 48-65) by using IP packets, the data could more easily be sent from the disclosed leased lines and digital data network (DDN, col. 9, lines 34-39) to the Internet so that more people could be reached and make use of the services. It is obvious that the DDN disclosed by Arimilli can be the Internet.

Claim Rejections - 35 USC § 103

9. Claims, 31-34, 53-56, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimilli (US 6,515,984) as set forth above in view of Chen (US 6,611,531).

However, Arimilli fails to particularly call for Frame Relay, ATM, and TDM, as specified in claims 60, 31-34, 53-56.

Chen teaches transmitting and receiving from a PSTN (e.g., col. 32, lines 54-67) to and from a digital data/packet network (Figs. 43, 45) where the DDN can be Frame Relay (Figs. 6, 10-12, 16, 18), ATM (Figs. 7, 13, 20), and TDM (Fig. 6) as specified in claims 60, 31-34, 53-56. Chen also teaches signals from telephones (col. 29), voice encoding (902, Fig. 9; 1010, Figs. 10, 21, 44), fax demodulating (Fig. 14).

It would have been obvious to make the DDN disclosed in Arimilli to be a FR, ATM or TDM network since Arimilli discloses packets and DDNs (col. 9, lines 34-39 and outputting to digital


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leased lines, col. 5, lines 9-13; col. 6, lines 9-14). By using the FR, ATM or TDM lines, the output data could be sent at a very high rate. Using FR and ATM data could be prioritized and Arimilli discloses using priorities (col. 6, lines 20-24).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 703 305 4957. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703 305 4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David R Vincent
Primary Examiner

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June 3. 2004